

Comparisons of Job Characteristics

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Conservation Scientists (19-1031)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 64

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Conservation Scientists (19-1031)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Biology	3.7	16.2	9.4	<<	Extensive education and/or training may be required
Geography	3.9	14.3	13.3	0	Current knowledge level may be sufficient
Law and Government	5.9	11.4	9.9	<	Expanded education and/or training may be required
History and Archeology	2.6	9.0	8.4	0	Current knowledge level may be sufficient
Food Production	2.1	5.5	3.2	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Conservation Scientists (19-1031)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Science	4.5	9.3	6.0	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	9.3	8.0	<	A higher skill level may be required
Operations Analysis	5.0	9.0	2.8	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Conservation Scientists (19-1031)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Expression	12.4	14.7	11.6	<<	Extensive improvement in abilities may be required
Oral Comprehension	12.5	14.0	12.3	<	Some improvement in abilities may be required
Written Comprehension	11.0	13.7	11.4	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	13.0	11.1	<	Some improvement in abilities may be required
Speech Clarity	10.2	12.7	9.7	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	12.6	11.8	0	Current ability level may be sufficient
Inductive Reasoning	10.2	12.2	10.6	<	Some improvement in abilities may be required
Written Expression	9.8	12.1	9.4	<<	Extensive improvement in abilities may be required
Speech Recognition	9.9	12.0	9.6	<	Some improvement in abilities may be required
Far Vision	7.8	10.5	11.9	>	Current ability level is likely sufficient
Originality	7.6	10.1	7.7	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 90

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Conservation Scientists (19-1031)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Advise clients or customers	19
Analyze biological research, test, or analysis data	70
Analyze scientific research data or investigative findings	27
Classify plants, animals, or other natural phenomena	69
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Conduct field research or investigative studies	52
Conduct land surveys	81
Conduct training for personnel	30
Develop or maintain databases	30

Develop tables depicting data	33
Direct and coordinate activities of workers or staff	3
Ensure compliance with government regulations	76
Explain complex mathematical information	30
Explain government laws or regulations	68
Interpret aerial photographs	69
Judge soil conditions	77
Maintain records, reports, or files	5
Make presentations	13
Obtain land survey data using surveying instruments	87
Operate emergency fire or rescue equipment	80
Operate forestry equipment	92
Operate land or site surveying instruments	80
Perform statistical analysis	71
Plan forestation, reforestation, or range revegetation projects	95
Prepare reports	8
Read maps	42
Read measuring or metering devices used in forestry	89
Read surveying instruments to measure property	99
Recognize plant diseases	72
Recognize tree or forest plant species	78
Recognize wood species characteristics	78
Record test results, test procedures, or inspection data	48
Use biological research techniques	68
Use building or land use regulations	65
Use computers to enter, access or retrieve data	3
Use fire suppression techniques	89
Use forest fire protection methods	89
Use forestry, range, or other public land management techniques	92
Use government regulations	44
Use herbicides, fertilizers, pesticides or related products	71
Use interpersonal communication techniques	10
Use knowledge of environmental laws and regulations	76
Use knowledge of investigation techniques	16
Use knowledge of regulations in surveying or construction activities	78
Use land surveying techniques	80
Use long term forest or range land planning techniques	95
Use mathematical or statistical methods to identify or analyze problems	30
Use oral or written communication techniques	1
Use pollution control techniques	62
Use public speaking techniques	13
Use quantitative research methods	35
Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17
Work as a team member	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 93

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Conservation Scientists (19-1031)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Cameras	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Industry specific software	1
Information exchange software	1
Land surveying instruments	19
Length and thickness and distance measuring instruments	2
Network applications software	1
Sampling equipment	12
Soil measuring equipment	20

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.